REMARKS

Claims 3, 4, 6-14, 16-22, and 25-33 remain in the application for consideration of the Examiner with Claim 15 standing cancelled.

Reconsideration and withdrawal of the outstanding rejections are respectfully requested in light of the above amendments and following remarks.

Claims 18 and 28-33 were objected to because of informalities.

By the instant amendment, the informalities noted by the Examiner have been corrected.

It is respectfully submitted that Claims 3, 4, 6-14, 16-22, and 25-33 are free from informalities.

Turning now to the art rejections, Claims 3 and 25 were rejected under 35 U.S.C. § 103 as being unpatentable over Wilson in view of Rainer and further in view of Lee; Claims 3 and 25 were rejected under 35 U.S.C. § 103 as being unpatentable over Werrbach and further in view of Lee; and Claim 15 was rejected under us 103 as being unpatentable over Werrbach in view of Dallavalle.

These rejections are respectfully traversed.

It is respectfully submitted that Wilson does not disclose or suggest the presently claimed invention including the automatic gain control circuit wherein the gain includes a canonical sign digit multiplier albeit defined as the method step of providing automatic gain control to the input signal wherein the gain is applied by a canonical signed multiplier in independent Claim 25.

Applicants agree with the Examiner that Wilson does not disclose the CSD multiplier.

It is respectfully submitted that Rainer does not disclose or suggest the automatic gain control circuit wherein the gain includes a canonical signed digit multiplier in the various forms in independent Claims 3 and 25.

Rainer does not disclose an ADC.

Lee and Werrbach does not cure the alone noted defects.

Applicants appreciate the indication that if Claims 4, 7-14, 16, 17, 22, and 28-33 were rewritten in independent form including the limitations of the base claim and any intervening claims these claims would be allowable.

Claims 4, 7, 16, and 28 have been placed in independent form including the limitations of the base claim and any intervening claims.

In light of the above, it is respectfully submitted that the present application is in condition for allowance, and notice to that effect is respectfully requested.

While it is believed that the instant response places the application in condition for allowance, should the Examiner have any further comments or suggestions, it is respectfully requested that the Examiner contact the undersigned in order to expeditiously resolve any outstanding issues.

To the extent necessary, Applicant petitions for an Extension of Time under 37 CFR 1.136. Please charge any fees in connection with the filing of this paper, including extension of time fees, to the deposit account of Texas Instruments Incorporated, Account No. 20-0668.

Respectfully submitted,

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